

**IN THE CLAIMS:**

Please cancel Claims 1, 6, 14, 15, 16, 21, 29, and 30 without prejudice. Please amend Claims 2-5, 7-11, 17-20, 22 and 24-26 to read as follows. (A redacted version of amended claims is attached to this reply.)

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2. A method for determining data relationships of data associated with product placement in a retail space, the method comprising the computer-implemented steps of:
- determining locations of products within the retail space using a position identifying system;
  - identifying customers within the retail space;
  - recording paths of customers through the retail space using the position identifying system;
  - identifying products chosen for purchase by the customers during the paths of the customers through the retail space; and
  - associating the locations of products within the retail space with the paths of the customers through the retail space to form a set of spatial relationships; and
  - employing data mining algorithms to generate input data for forming the set of spatial relationships.
3. The method of claim 2 further comprising:
- employing spatial analysis algorithms to form the set of spatial relationships.
4. The method of claim 2 wherein the position identifying system comprises a global positioning system or other remote sensing device.
5. The method of claim 2 wherein the position identifying system comprises a local positioning system that may or may not be associated with a global positioning system.

7. The method of claim 9 further comprising:  
selecting locations for products in the retail space based on the set of spatial relationships.
8. The method of claim 7 further comprising:  
identifying locations of products relocated within the retail space based on the selected locations; and  
associating the patterns of customers with the locations of relocated products to form a second set of spatial relationships.
9. A method for determining data relationships of data associated with product placement in a retail space, the method comprising the computer-implemented steps of:  
identifying patterns of customers in the retail space;  
identifying locations of products within the retail space; and  
associating the patterns of customers with the locations of products to form a set of spatial relationships; and  
employing data mining algorithms to generate input data for forming the set of spatial relationships.
10. The method of claim 9 further comprising:  
employing spatial analysis algorithms to form the set of spatial relationships.
11. The method of claim 9 further comprising:  
identifying patterns of customers and locations of products within the retail space comprises using a position identifying system.
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17. A data processing system for determining data relationships of data associated with product placement in a retail space, the data processing system comprising:  
determining means for determining locations of products within the retail space using a position identifying system;  
first identifying means for identifying customers within the retail space;

recording means for recording paths of customers through the retail space using the position identifying system;

second identifying means for identifying products chosen for purchase by the customers during the paths of the customers through the retail space; and

associating means for associating the locations of products within the retail space with the paths of the customers through the retail space to form a set of spatial relationships and

first employing means for employing data mining algorithms to generate input data for forming the set of spatial relationships.

18. The data processing system of claim 17 further comprising:

second employing means for employing spatial analysis algorithms to form the set of spatial relationships.

19. The data processing system of claim 17 wherein the position identifying system comprises a global positioning system.

20. The data processing system of claim 17 wherein the position identifying system comprises a local positioning system.

22. The data processing system of claim 24 further comprising:

selecting means for selecting locations for products in the retail space based on the set of spatial relationships.

24. A data processing system for determining data relationships of data associated with product placement in a retail space, the data processing system comprising:

first identifying means for identifying patterns of customers in the retail space;  
second identifying means for identifying locations of products within the retail space; and

first associating means for associating the patterns of customers with the locations of products to form a set of spatial relationships and